

Jaguar Conservation Team (JAGCT)- Habitat Subcommittee Summary Notes
Forest Service Office, Douglas, Arizona
December 12, 2000

In attendance: L. Averill-Murray, B. Brown, D. Cullum, J. Hatten, G. Helbing, S. Johnson, S. Krentz, C. Miller, M. Robinson, T. Snow, B. Van Pelt

Meeting Convened: 1015

1. The jaguar list-server was discussed as a business tool, especially as a means of distributing reports for review and editing. Potential problems were raised regarding people not being able to subscribe to or receive certain documents on a list-serve.
2. The Habitat subcommittee was asked to respond to the Jaguar Scientific Advisory Group's (JAGSAG) comments regarding the jaguar conservation strategy. Nobody raised objections to the JAGSAG's comments. The subcommittee discussed the importance of studying habitat use of jaguars in Sonora, Mexico, recognizing that the JAGSAG recommended that habitat suitability modeling should continue using general information until specific habitat-use data is available from Sonora.
3. Jim Hatten, AGFD GIS specialist, gave a presentation on modeling habitat components for the jaguar. Jim stressed that the scarcity of data makes quantitative, GIS-based modeling difficult. With this in mind, the objectives of the model were to identify relationships between historic jaguar sightings and physical factors (e.g., elevation and distance to water); determine relationships between historic jaguar sightings and potential prey species; ascertain relationships between historic jaguar sightings and the vegetation biomes of Arizona; and determine the suitability of constructing a GIS-based model with any or all of the above variables. The general conclusions of the modeling exercise were that jaguars have been most often observed in low human density areas; jaguars were more common in javelina, white-tailed or mule deer habitats, less common in elk habitats; jaguars were usually within 15-km of perennial or intermittent waters; and jaguars were observed twice as often in scrub grasslands as any other habitat type. At this point, we need more data on habitat use of jaguars in Mexico and we need to identify potential travel corridors from Mexico.
4. Future task assignments and deadlines were established. Additional layers to add to Jim's descriptive model were discussed. Information missing from the model at this time include 1) livestock density; 2) precipitation and season of sighting (i.e., are jaguars sighted in Arizona in dry or wet years/seasons); 3) road density; 4) environmental conditions in Sonora, Mexico at time of jaguar sightings north of the border (conditions that might be causing jaguars to move north in search of food, water, etc.); 5) changes in vegetation through time (what were the conditions of shrub-grasslands at the time of particular jaguar sightings); and 6) information from New Mexico that should be included in the model. Jim Hatten will try to include some of this information for his presentation at the next Conservation Team meeting.

but time is short. Bill Van Pelt will contact the New Mexico Game and Fish Department to access their information on prey densities, but information is recorded differently from Arizona's data and it will need to be standardized eventually. We will need to include definitions of prey densities in the final technical report.

The subcommittee voted that the AGFD should write the technical report to submit to the Jaguar Conservation Team for review and comments. The following deadlines were established:

- 1/18/00: Next Jaguar Conservation Team meeting
- 3/01/00: First draft of jaguar use analysis technical report distributed to the Habitat Sub-committee for comments
- 3/31/00: Comments on report due back to AGFD
- 5/01/00: Second draft of technical report to Conservation Team and Conservation Advisory Group
- 6/01/00: Comments on report due back to AGFD
- 6/15/00: Final report to Conservation Team

5. Additional agenda items: It was suggested that INS be invited to attend the Jaguar Conservation Team meetings due to brush-clearing projects and the installation of stadium lights along the border. It was suggested that Terry Johnson, AGFD and Conservation Team Chair, write a letter to INS requesting their attendance at the meetings and for them to consider impacts of their activities on jaguar movements across the border.

The apparent lack of coordination between studies using trip cameras was discussed. This coordination needs to be pursued so that new studies can concentrate on installing cameras in areas with gaps in surveillance.